

Transitional Oceanic Waters >34.9 ppt to < 35.5 ppt (use proposed table for transitional oceanic waters)

Pearl Harbor Estuary Only has its own site-specific criteria, and criteria for the Kona (west) coast of the island of Hawaii have been linked on the shoreline, where applicable, to the table of Estuaries Other Than Pearl Harbor, and to the saline coastal waters table.

Other amendments are proposed. First: 11-54-4(d) (new paragraph) allows discharge of certain pesticides into, over, or near state waters in compliance with the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), provided that the conditions of a proposed general permit. (to be placed in HAR 11-55 as Appendix M), are met. Second: we have amended section 8, criteria for recreational waters, to correspond to the federal criterion of 35 enterococcus per 100 ml of brackish or saline waters (the current criterion is 7), and to move the recreational waters boundary from 300 m to 500 m offshore and add different single-sample maxima for coastal waters versus waters more than 500 m from shore. (The enterococcus WQS for fresh waters, of salinity less than or equal to 0.5 ppt, remains at 33 CFU per 100 ml freshwater).

Amendments summarized by rule section:

1. Section 11-54-1 Definitions. (See the Rationale document and the Ramseyer version of section 1 for more information.

Definition proposed for deletion: "ambient conditions"; to be replaced by a definition of geolocated "control stations".

Definitions proposed for modification: "brackish waters", "coastal waters" "ditches and flumes", "drainage basin or watershed", "estuaries" "fresh waters", & "saline waters"

New Definitions: "designated uses", "control station", "geometric mean", "pesticide", "reference sites", "sample size"..

2. Section 11-54-2 Classification of state waters. (See the "Guidelines Table" at the beginning of proposed Appendix A; it is also placed at the end of the Ramseyer document, and see the Ramseyer version of section 2 for more information).

The classification of state waters is changed to show that "Inland Waters" now include only fresh waters (≤ 0.5 ppt), and that "Marine Waters" now include all brackish and saline waters (tidally-influenced waters of salinity >0.5 ppt to < 36 ppt. The major reason for reclassification on the basis of salinity gradients is that it makes use of recent scientific findings, and places the rule on a sounder scientific basis. Another reason is that the federal BEACH Act considers estuaries as coastal waters; using the same classification in Hawaii simplifies application of the federal rule in the state, and makes Hawaii data comparable to those from other states.

Tidally-influenced waters (brackish and marine) dilute land-based pollutants flowing seaward in streams, stormdrains, sheetflow, and in surfacing groundwater entering estuaries and shoreline waters. Land-based pollutants generally attain their highest concentrations and loads before dilution by brackish or saline waters. Consequently, sections 1, 2, 3, 5, 6, and 8 are modified to reflect that salinity changes along gradients, and that pollutant concentrations typically decline as the distance from shore increases.

1. Section 11-54-3 Classification of water uses. (See the Rationale document and the Ramseyer version of section 3 for more information.)

We propose deletion of the inland fresh water uses for "shipping and navigation", which are not suitable for Hawaii's short and often steep streams. "Shipping and navigation" are legally defined under Admiralty Law, which facilitates commerce in both tidal and non-tidal waters, as long as they are "navigable waters", and also covers recreational boating. However, to make clear that Hawaii's fresh water streams will only support use of small, narrow and shallow draft boats, we have changed the name of this use to "small commercial boats and ecotourism".

- Section 11-54-4 Basic water quality criteria applicable to all waters. (See the Rationale document, and the Ramseyer version of section 4 for more information.)

In paragraph (a) we have added examples that include, but are not limited to, types of materials and/or conditions that apply to each narrative criterion, and added a simple scoring system in which "YES = (1)" means that materials and/or conditions are visible at the site that should not be there (waters at this site are not "free-from" one or more visible materials and/or conditions). "NO = (0)" means that materials and/or conditions that apply to each narrative criterion are not visible at the site. Submittal of a column of data (the zeros and ones) and brief mention of what visible materials and/or conditions should not be there will be required when a site is assessed either visually or by data collection or both. The narrative criteria will become an integral part of water quality monitoring and assessment, and are analogous to a general visual description of the site.

For clarity - paragraph (c), which contains an exemption for erosion from agricultural lands, has been moved so that it directly follows narrative criterion. 6. These two paragraphs were together in earlier editions of the rule (1968 and 1975), but the exemption is more broadly worded to apply to erosion in general in the 1968 rule. The 1975 exemption statement is also broad, but agricultural lands are specifically mentioned. Because the soil conservation plans required to trigger this exemption, as worded in the current rule, are not submitted to DOH for review, we propose to delete the "Director of Health" from paragraph (c).

A new paragraph (d) is added, which attempts to reconcile the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) with the Clean Water Act by authorizing the department to discharge pesticides directly into, near or over state waters for control of insect vectors of disease, such as mosquitoes (West Nile Virus & others). A broader application of this amendment, covering existing uses and uses for restoration is also proposed. These pesticides must be applied under the terms of an accompanying General Permit for vector control, to be placed in HAR 11-55, Water Pollution Control, as Appendix M. The proposed amendment also allows pesticides to be present in surface waters in excess of concentrations allowed in 11-54-4 (a) and (b), the narrative criteria and numerical toxic criteria, although this statement remains under evaluation by our water program deputy attorney general.

- 5) Section 11-54-5 Inland criteria (fresh waters only) .

The only remaining table of numeric criteria associated with the "Inland Waters" class is the table of numeric criteria for streams (fresh water portions only, with salinity

of less than or equal to (\leq) 0.5 ppt). The table for streams has been moved to Appendix A and labeled Table 1.

Modifications have been made to the temperature, salinity, pH and dissolved oxygen WQS for streams. The third column (the two per cent NTE column) is proposed for deletion [because the values in this column are based on statistical assumptions and not on field data, and because sample sizes are rarely large enough to accurately assess the "two per cent NTE". We recommend that](#) extreme parameter values be assessed with the use of stream discharge data (mostly from USGS), runoff data, and rainfall data.

The two tables for estuaries have been bracketed for deletion from section 5, moved to Appendix A, and relabeled as Table 2 (Estuaries Other Than Pearl Harbor) and Table 5 (Site-Specific Table for Pearl Harbor Estuary)..

6) Section 11-54-6 Uses and specific criteria applicable to marine waters.

Section 6 now includes all WQS text for both brackish and saline waters. The numeric table for open coastal waters is now restricted to saline coastal waters only, and moved to Appendix A as Table 3, along with both estuary tables and the proposed transitional oceanic waters table of criteria (See Appendix A, Tables 2, 5, and 4).

Modifications have been made to the temperature, salinity, pH and dissolved oxygen WQS limits in these tables, and the third column (the two per cent limit) is proposed for deletion [because these values are based on statistical assumptions and not on field data. The overall geometric mean and ten per cent columns are retained; the "2 % NTE" criteria always remain part of the original data set and can be computed, if needed. We recommend that extreme parameter values be also evaluated with the use of rainfall data, runoff data, and data from USGS gauging stations.](#)

The definitions and table of numeric criteria for embayments are proposed for deletion on the basis that the proposed salinity ranges and numeric criteria for brackish and saline coastal waters will cover the embayment criteria. The embayment criteria are quite similar to the geometric mean and ten per cent levels of the "Estuaries Other than Pearl Harbor" table, and are now considered redundant. We have retained the list of embayment waters to be protected, calling them "harbors and narrow bays" (these are "plain English" terms, and take their dictionary meaning in the rule).

The table of oceanic criteria has been modified on the basis of the 1977 Water Quality Technical Committee Report, on which much of the current rule is based. By comparing very low and stable offshore concentration data (from Aloha station 2), oceanic waters criteria in the current rule, transitional oceanic criteria from 1977, and readily available data sets, we propose a "transitional oceanic waters" table because a number of lines of evidence show that land-based sources of pollutants are still detectable seaward of saline coastal waters. Also, the site-specific criteria table for the Kona Coast of the island of Hawaii has been moved to Appendix A as Table 6.

7) Section 7 Uses and specific criteria applicable to marine bottom types. This section is not proposed for amendment.

Section 8 Specific criteria for recreation areas.

In response to a recent final federal rule containing implementing regulations for the federal BEACH Act of 2000, we have modified section 8, paragraph (b), marine waters, to comply with the new federal rule.

The inland indicator bacteria criterion of 33 enterococcus per 100 ml of freshwater is not proposed for amendment, but now applies only to freshwaters of salinity less than or equal to 0.5 ppt.

We propose raising the water quality criterion for recreational brackish and saline coastal waters and transitional oceanic waters, as well as for any oceanic waters within the state's three-mile regulatory limit (full salinity range covered is greater than 0.5 ppt to less than 35.5 ppt) from seven CFU enterococcus per 100 ml to the federal standard, thirty-five CFU enterococcus per 100 ml. *The revised WQS will cover surface waters from the shoreline to the state's three-mile regulatory limit, and to a depth of 100 feet.*

Adopting the federal standard will allow better comparability with data collected from other states, and also make it easier to obtain accurate bacterial counts. Note that there is no credible scientific evidence that adopting the federal enterococcus criterion of 35 CFU per 100 ml water increases risks to public health, *and that there is no measured level of risk to public health derived from data that applies below the federal criterion of 35 CFU per 100 ml, established on the basis of earlier research on the Mainland U.S.* This amendment proposal is supported by EPA.

We have also:

- moved the recreational waters boundary from 300 m offshore to 500 m offshore from the shoreline to ensure that the majority of the surf breaks are included within this boundary;
- established a single sample maximum of 100 CFU of enterococcus per 100 ml of water within the proposed 500 m recreational boundary for primary use recreational waters, and a single sample maximum of 501 CFU of enterococcus per 100 ml of water seaward of the 500 m recreational boundary for less-frequently used waters; and
- We are applying the federal standard of 35 CFU enterococcus per 100 ml water *to a depth of 100 feet* and from the shoreline out to the state's three-mile regulatory limit.

9) Section 9.01 Water Quality Certification. We propose adding, to section 9.01, three references to Clean Water Act Sections 301, 302, 303, 306 and 307 (applicable provisions only).

10) Section 10 Water quality analyses. At the request of the Attorneys General' Department, we have prepared a draft policy for approval of analytical laboratories, and for evaluating acceptability of data received, as required by paragraph (a). The draft policy is posted on the EPO website. *Alternatively, and depending on pending legal advice, we may remove the part of paragraph (a) containing this requirement.*

11) Sections 11 and 12 are not proposed for amendment.